

MEMO

Date: August 19, 2003
To: TCC
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Subject: Evaluation of Growth Scenarios

BACKGROUND

SCAG was directed by the Community, Economic and Human Development Committee to evaluate five growth scenarios and report on the results. The five scenarios include three technically derived scenarios and two scenarios developed by the growth visioning initiative (referred to as infill and fifth ring)

EVALUATION RESULTS

All five growth scenarios were modeled and the results evaluated using the adopted performance measures. The performance measures used included mobility and accessibility indicators. The other indicators would in large measure be the same for the five scenarios since they are less sensitive to changes in growth distributions. For instance, the reliability indicator is sensitive to operational investments, which were assumed to be the same for the five scenarios. The same applies to productivity, preservation, and safety.

The evaluation is detailed in the attached presentation and included an analysis of mobility and accessibility using a network that included all committed projects (also referred to as Tier 2 network). It also included an evaluation of a Plan network which represented the 2001RTP modified list of projects for the technical scenarios and a targeted list of projects with the same overall costs for the growth visioning scenarios.

The results demonstrate how the infill and fifth ring scenarios (also referred to as PILUT 1 and PILUT 2) actually perform better than the technical scenarios. In particular, the reductions in delay as the result of the "Plan" investments are significantly higher for PILUT 1 and PILUT 2. PILUT 1 performs the best with a reduction of 700,000 hours of daily delay, while PILUT 2 reduces the delay by 500,000 hours. The three technical scenarios each reduce delay by 200,000 hours.

SCAG staff and consultants are currently reviewing these results so that they can incorporate pragmatic land use changes to the baseline upon which to develop the draft plan. This "hybrid" scenario will represent the targeted and achievable distribution of population, household and employment. A specific action plan for meeting that target will also be developed and presented to the policy committees.



Southern California Association of Governments

System Performance Measures

Scenario Performance Update

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Agenda

- Summary of growth scenarios
- Tier 2 mobility and accessibility results (for all scenarios)
- Plan mobility and accessibility results (for all scenarios)
- Preliminary conclusions
- Next steps

Summary of growth scenarios

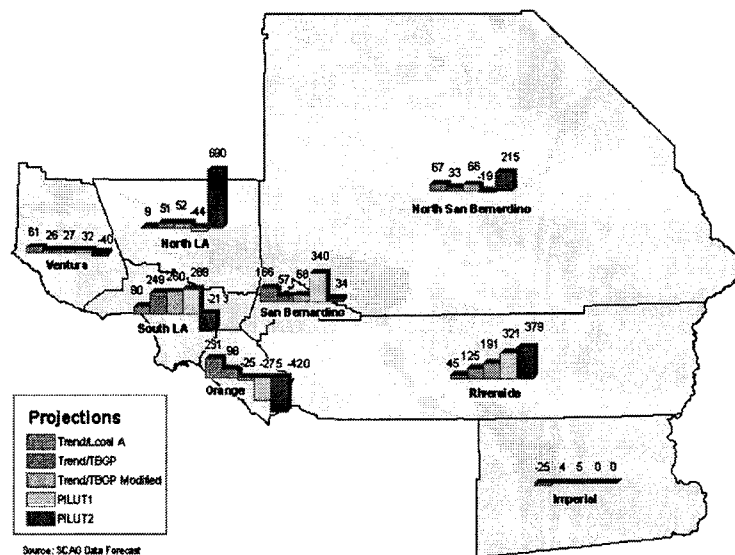
PILUT 1 (infill) and PILUT 2 (fifth ring) scenarios have been adjusted and finalized

The three technical scenarios have also been finalized

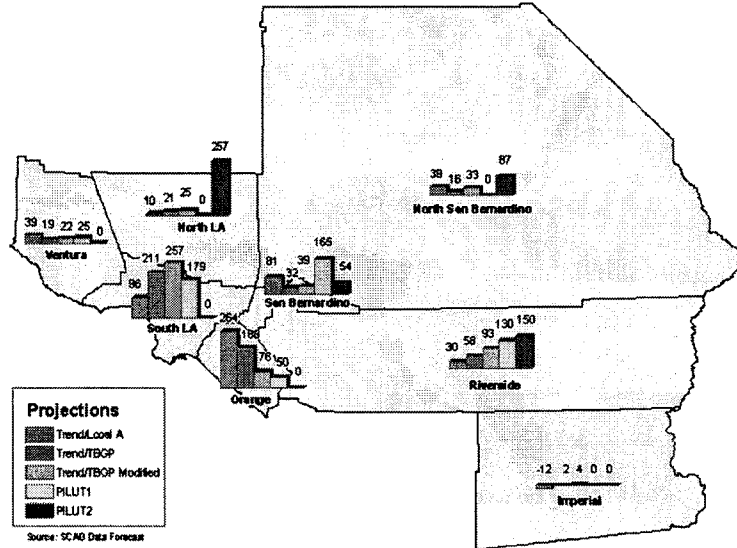
The results are compared by county and sub-county to show the differences in:

- Population projections
- Household projections
- Employment projections

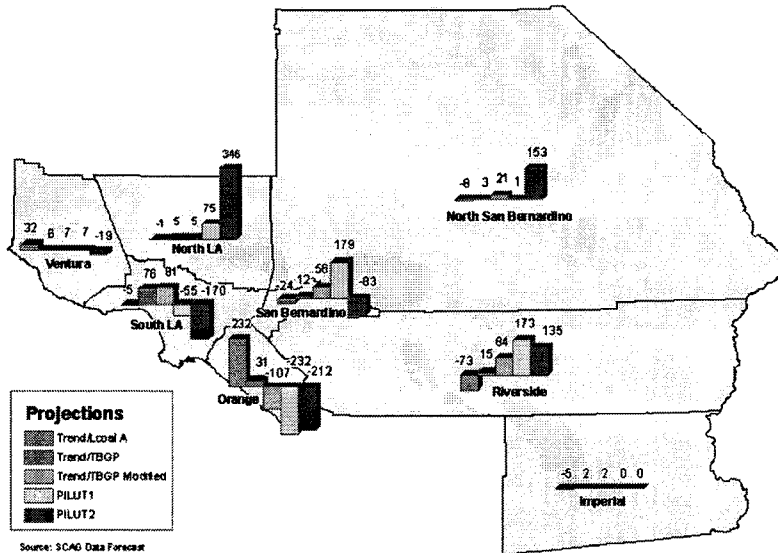
Population Change 2000 to 2030
Difference Between Local Input and 5 Projections (In Thousands)



Housing Change 2000 to 2030 Difference Between Local Input and 5 Projections (In Thousands)



Employment Change 2000 to 2030 Difference Between Local Input and 5 Projections (In Thousands)



Tier 2 mobility and accessibility results

The same network was modeled for all five growth scenarios

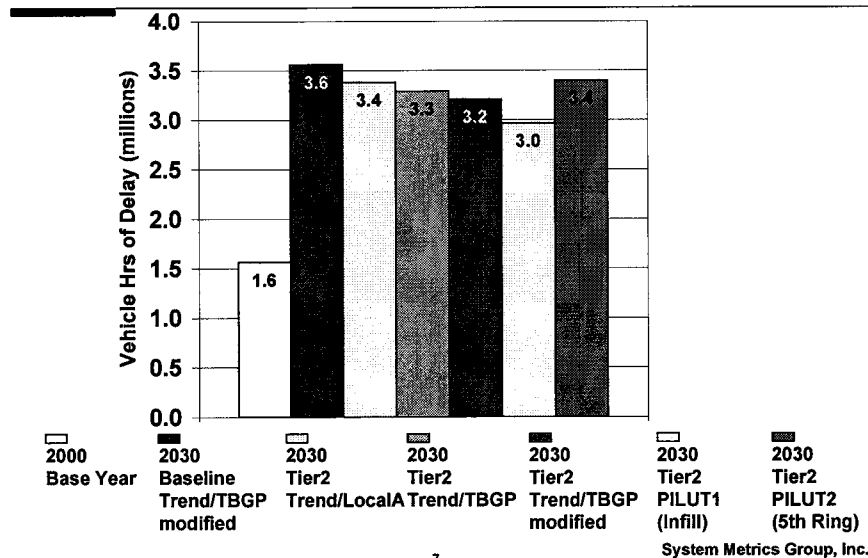
For now, we compared the results to Base Year 2000 and TBGP Modified with programmed projects

Delay and accessibility results were compared across scenarios for SCAG region and by county.

6

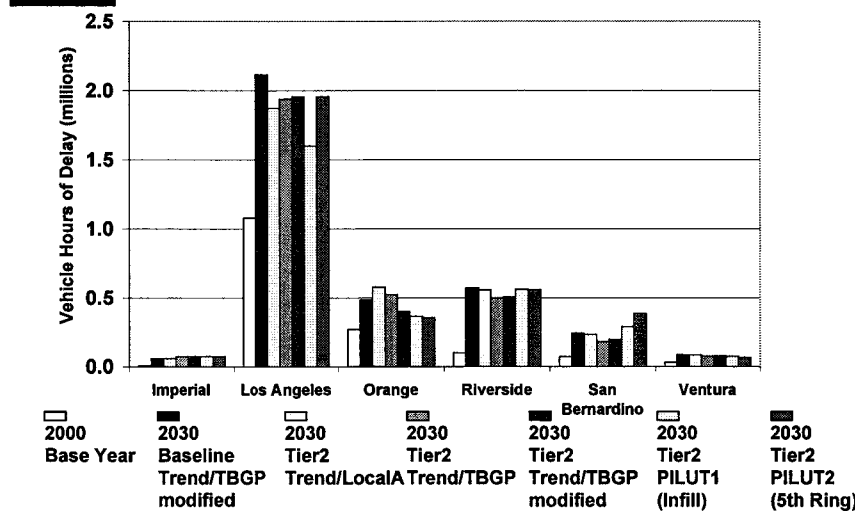
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Regional Daily Vehicle Hours of Delay



7

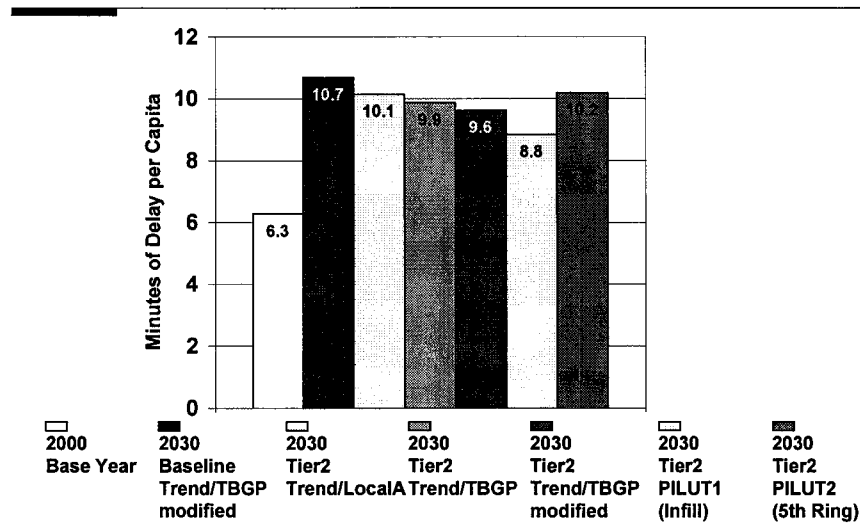
Daily Vehicle Hours of Delay By County



Note: Imperial County results are not available for PILUT1 and PILUT2. Placeholders are shown.

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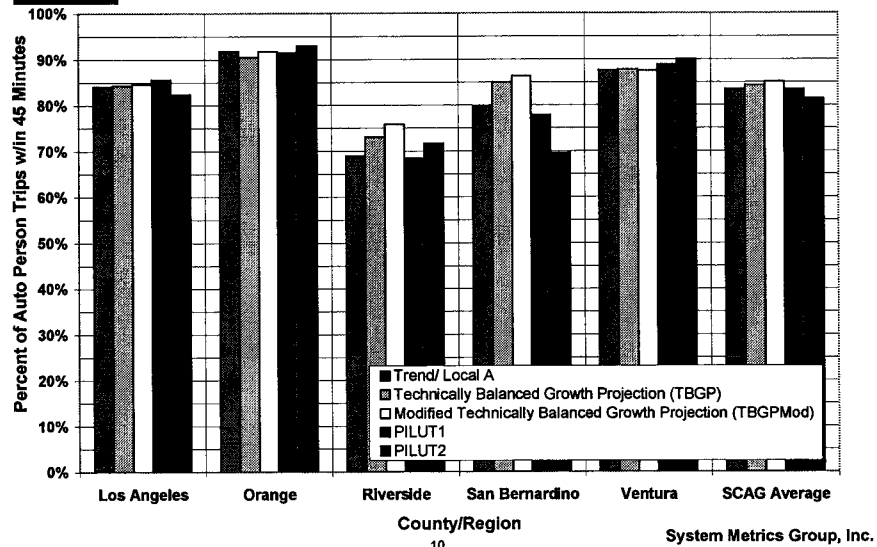
Daily Delay Per Capita



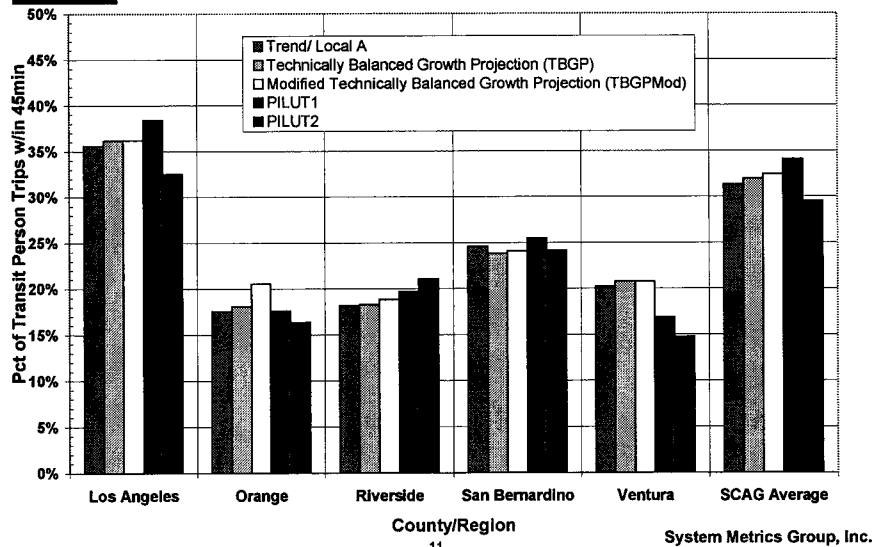
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Tier 2 auto accessibility results



Tier 2 transit accessibility results



Plan Mobility Results

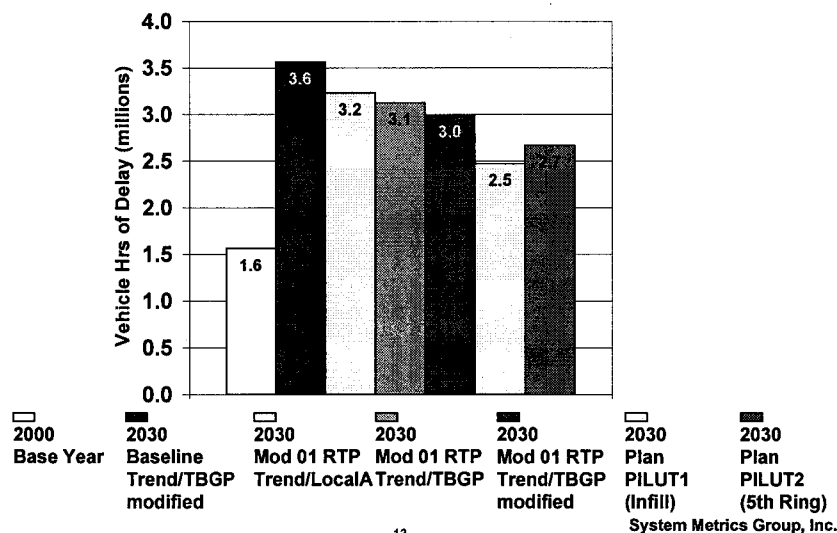
The same network was modeled for the three technical scenarios

The network represents the additional projects (over and beyond Tier 2) by taking the adopted 2001 RTP and updating the mix of projects and programs based on recent input by the county transportation commissions.

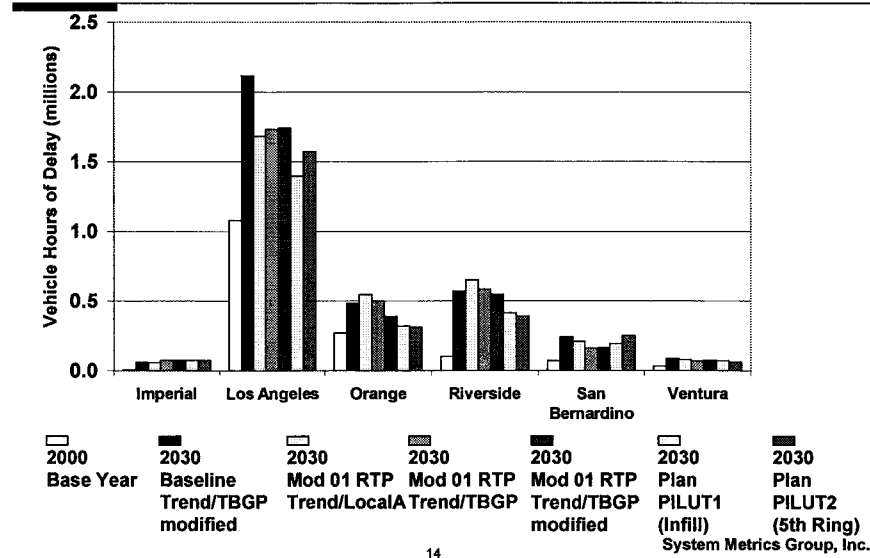
Different networks (i.e., different projects) were selected for PILUT 1 and PILUT 2 to address specific problems related to growth differences.

Delay and accessibility results were compared across scenarios for SCAG region and by county.

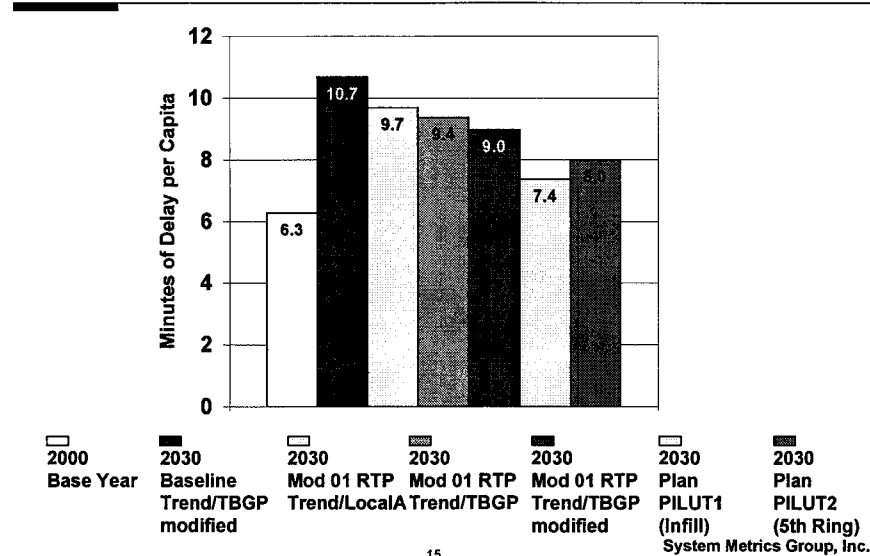
Regional Daily Vehicle Hours of Delay



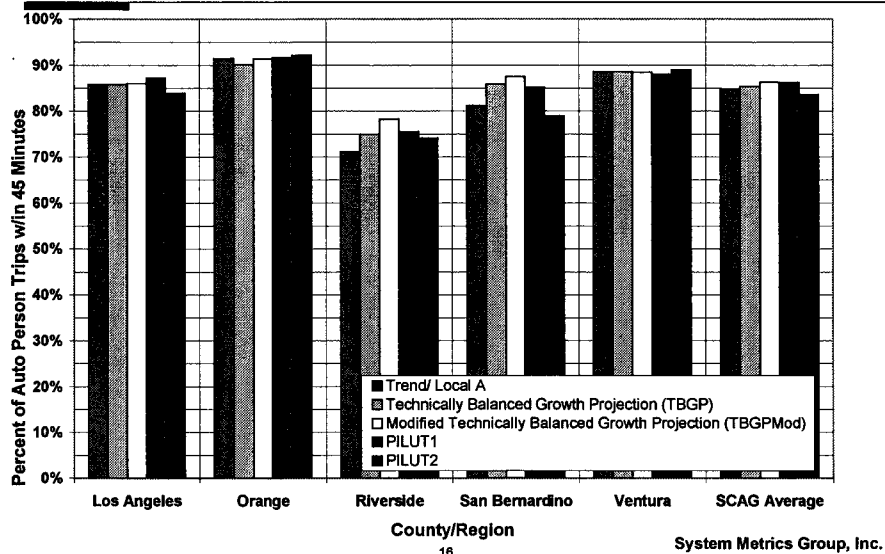
Daily Vehicle Hours of Delay By County



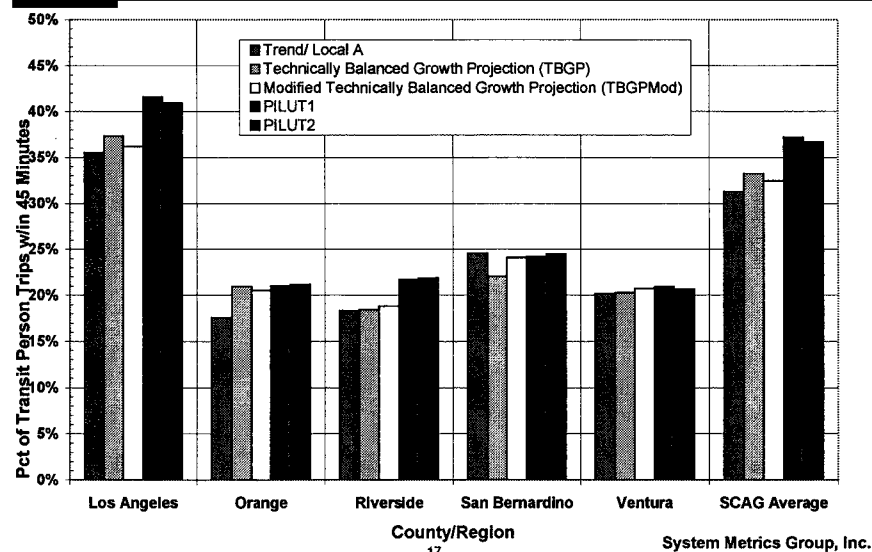
Daily Delay Per Capita



Plan auto accessibility results



Plan transit accessibility results



Preliminary conclusions

PILUT 1 and PILUT 2 reflect book end scenarios that are not likely to be achieved, at least for now

PILUT 1 performs best for both Tier 2 and Plan networks

PILUT 1 and PILUT 2 perform better with tailored projects that address their deficiencies (delay decreases by 500,000 and 700,000 daily hours of delay respectively)

The three technical scenarios show modest mobility improvements with the plan networks (around 200,000 daily hours)

Next steps

We need to learn from the performance results of PILUT 1 and PILUT 2 and incorporate smaller, pragmatic changes in building the Hybrid scenario

We then need to select tailored projects for the hybrid scenario for the plan

The capital expenditure for the "Plan" will be limited to the total available from the innovative financing less \$8.3 billion which would address shortfalls in preservation and State Highway operations needs.